



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: January 24, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement January 26, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Thursday, February 8, 2018**. Applications will not be accepted after that time and date.

NOTE: Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

ET V Investigations & Repair Plans Group Technician
Bureau of Bridges & Structures
Office of Program Development
Springfield

Attachments
42505

Technical Applications [PM1080 rev 6/1/17](#) **must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by **Thursday, February 8, 2018, 4:30 p.m.** Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



**Illinois Department
of Transportation**

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Engineering Technician V	Salary:	\$5,015 - \$7,085*
Position Title:	Investigations & Repair Plans Group Technician	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW015-23-65-906-22-01	IPR#:	42505

Office/Central Bureau/District/Work Address:

Office of Program Development / Bureau of Bridges and Structures/ 2300 S. Dirksen Parkway, Springfield, Illinois

Description Of Duties:

This position is accountable for performing, directing and managing the drafting, plan layout, and design detailing of structural repair and retrofit design drawings for emergency, maintenance and contract plans for all types of structures including extremely complex major river bridges.

Special Qualifications:

Required:

- Valid driver's license
- Statewide travel

Desired:

- Completion of three years of college with the major course of study being in pre-engineering, completion of a two-year program in civil engineering technology or a four-year degree in scientific program other than engineering
- Twelve years of engineering technician experience under the direction of a professional engineer with a minimum of three years in a supervisory position
- Ability to plan, organize, and execute administrative or technical program requirements

Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

**Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	November 7, 2017	POSITION:	Investigations & Repair Plans Group Technician
APPROVED BY:	Carl Puzey	OFFICE:	Office of Program Development/ Bureau of Bridges and Structures
CODE:	PW015-23-65-906-22-01	REPORTS TO:	Bridge Investigations & Repair Plans Unit Chief

Position Purpose

This position is accountable for performing, directing and managing the drafting, plan layout, and design detailing of structural repair and retrofit design drawings for emergency, maintenance and contract plans for all types of structures including extremely complex major river bridges.

Dimensions

Personnel Supervised:	6 Direct
Annual Total Projects:	100-150
Annual Value of Contract Repairs	\$10,000,000

Nature and Scope

This position reports to the Bridge Investigations & Repair Plans Unit Chief as does the Repair Plans Group Engineer. Reporting to the position are the Senior Repair Plans Technician, the Repair Plans Technician, Associate Repair Plans Technician, and the Assistant Repair Plans Technician.

This position operates in an environment of performing and/or directing the prompt and accurate production of routine and emergency structural repair and retrofit design plans. In order for the incumbent to effectively perform the assigned duties, s/he must have a comprehensive, concise, and clear understanding of basic engineering concepts and structural design practices and principles. When directed by the unit chief, the incumbent will assist district personnel during field investigations of damaged or deteriorated structures by providing guidance to the districts to ensure that adequate information is obtained to determine repair requirements. The incumbent should also have knowledge of fracture critical criteria as related to the functioning of steel structures to perform proper field investigations and to develop appropriate repair details.

Typical challenges faced by the incumbent include the necessity to keep abreast of repair techniques and unique details used in structure deficiencies. The incumbent shall identify situations which may result in structure deficiencies. The incumbent must maintain the ability to prepare or direct the production of repair plans quickly and accurately in emergency repair situations. S/He must also have a working knowledge of and ability to utilize personal computers, the mainframe computer, and the Computer Aided Design and Drafting system (CADD). The incumbent is faced with the necessity to train and manage subordinates in several diverse and unique areas. S/He faces the problem that each emergency repair situation is unique and requires individual investigation and non-standard solutions. The greatest challenge faced by the incumbent is to manage the production of or personally produce accurate repair/retrofit design plans for unique and frequently complex repairs quickly and accurately in emergency situations.

The incumbent is personally responsible for the preparation of and/or managing the development of accurate and complete emergency repair and retrofit structure plans. S/He is also personally responsible for the development, direction, and training of subordinate personnel. The incumbent prioritizes and assigns work to, monitors, and evaluates staff; reviews repair projects prepared by subordinate personnel to ensure the utilization of correct drafting techniques; and researches and recommends solutions to problems for special projects. The incumbent also makes

recommendations concerning disciplinary actions, promotions and other personnel actions.

The incumbent performs responsibilities utilizing the following:

Senior Repair Plans Technician who is accountable for the drafting, plan layout and design detailing required in the production of structural repair and retrofit design drawings for emergency, maintenance and contract plans for structures of major magnitude and/or complexity.

Repair Plans Technician who is accountable for the drafting, plan layout and design detailing required in the production of structural repair and retrofit design drawings for emergency, maintenance and contract plans for complex structures.

Associate Repair Plans Technician who is accountable for the drafting, plan layout and design detailing required in the production of structural repair and retrofit design drawings for emergency, maintenance and contract plans for moderately complex structures.

Assistant Repair Plans Technician who is accountable for the drafting, plan layout and design detailing required in the production of structural repair and retrofit design drawings for emergency, maintenance and contract plans for simple structures.

The incumbent must refer to his/her superior for resolution of problems concerning deviations from departmental policies, specifications and standards. This position is guided by AASHTO specifications and current specifications and applicable departmental policies.

The incumbent has contact with central bureaus and district staff while handling day-to-day operations. Statewide travel is required.

The effectiveness of this position can be measured by the incumbent's ability to produce and manage the production of repair and retrofit plans expeditiously and accurately.

Principal Accountabilities

1. Performs and directs the layout of structural repair plans of structures of all complexities.
2. Prepares and directs the preparation of efficient and concise emergency repair plans, retrofit plans or details and ensures compliance with departmental policy and procedure. This includes structures damaged by vehicles or river traffic.
3. Reviews/directs the review of pre-final repair drawings for completeness of design and conformance with departmental policy.
4. Develops, maintains and provides staff with knowledge of repair techniques and unique details for incorporation into repair plans.
5. Produces and directs the production of repair plans utilizing the CADD drafting system.
6. Advises on the collection of data needed during the field investigation of damaged and deteriorated structures when directed to do so by the unit chief.

7. Trains, motivates, and evaluates staff and provides guidance and assistance to engineering technicians within the squad during training on the CADD drafting system.
8. Determines and reports Illinois structure square foot costs to the FHWA and the districts.
9. Performs other duties as assigned.
10. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.